



LONG ISLAND UNIVERSITY

SCIENCE ENGINEERING RESEARCH GROUP

E7.3 109.67

CR-133746

ERTS 069

Received in ERN
SEP 11 1973

ADDRESS REPLY TO:
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15 August 1973

National Aeronautics and Space Administration
Goddard Space Flight Center
Greenbelt, Maryland 20771

Gentlemen:

RE: Type I Progress Report for the Period
15 June 1973 to 15 August 1973

This document is submitted herewith in reference to Contract No.
NAS5-21793 and includes the following:

A) Title of the Investigation: "In Situ Spectroradiometric Quan-
tification of ERTS Data"

B) GSFC Identification Number: UN 295 (Dr. Edward Yost)

C) Cloud-free ERTS frames were selected for analysis using multi-
spectral additive color techniques. All four MSS bands for these frames
were photographically reprocessed for maximum detail. Color composite
in different multispectral renditions were made by employing an additive
color viewer.

D) Particular areas in the ERTS frames taken on different dates were
magnified to a larger scale and a comparison is being made on a temporal
basis for any chromatic changes on these images covering the agricultural
areas near Phoenix, Arizona.

E) A time sequential multispectral color analysis will also be per-
formed on selected ERTS frames using imagery taken on consecutive over-
passes in order to relate color to environmental changes as a function of
time.

F) Any ground truth over Arizona test site is being requested from the
Geological Survey and Agricultural Experiment Station in Phoenix, Arizona.
It is believed that correlation of such data with ERTS images would be most
helpful in establishing the detection of environmental changes using ERTS
imagery.

Very truly yours,

Edward Yost
Professor and Director

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(E73-10967) IN SITU SPECTRORADIOMETRIC
QUANTIFICATION OF ERTS DATA Progress
Report, 15 Jun. - 15 Aug. 1973 (Long
Island Univ.) 1 p HC \$3.00 CSCL 05B